

Project Euler #7: 10001st prime

This problem is a programming version of [Problem 7](#) from [projecteuler.net](#)

By listing the first six prime numbers: **2, 3, 5, 7, 11** and **13**, we can see that the **6th** prime is **13**.
What is the ***N***'th prime number?

Input Format

First line contains ***T*** that denotes the number of test cases. This is followed by ***T*** lines, each containing an integer, ***N***.

Output Format

Print the required answer for each test case.

Constraints

$$1 \leq T \leq 10^3$$

$$1 \leq N \leq 10^4$$

Sample Input

```
2
3
6
```

Sample Output

```
5
13
```